

Mosel Avenue Bridge  
Spanning the Kalamazoo River  
Kalamazoo  
Kalamazoo County  
Michigan

HAER No. MI-37

HAER  
MICH.  
39-KALAM.  
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PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

HISTORIC AMERICAN ENGINEERING RECORD  
MID-ATLANTIC REGION, NATIONAL PARK SERVICE  
DEPARTMENT OF THE INTERIOR  
PHILADELPHIA, PENNSYLVANIA 19106

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HISTORIC AMERICAN ENGINEERING RECORD

MOSEL AVENUE BRIDGE

HAER No. MI-37

Location: Spanning the Kalamazoo River on Mosel Avenue in Kalamazoo Township, located at the cities of Kalamazoo and Parchment, Kalamazoo County, Michigan.

UTM: 16.617600.4685835

Quad: Kalamazoo, Michigan

Date of  
Construction: 1924

Present Owner: Kalamazoo County Road Commission  
3801 East Kilgore Road  
Kalamazoo, MI 49002

Present Use: Vehicular and pedestrian bridge, to be demolished  
1990.

Significance: This three span bridge, with an overall length of 210 feet, is the second longest surviving concrete camelback bridge designed by the Michigan State Highway Department. All spans are of standard Highway Department designs. The contractor was J. P. Rusche of Grand Rapids, Michigan. This structure was determined eligible for listing in the National Register of Historic Places on April 1, 1986.

Project Information: Documentation was undertaken in June 1989 in accordance with the Memorandum of Agreement by the Kalamazoo County Road Commission as a mitigative measure prior to the replacement of the bridge.

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The Mosel Avenue bridge was constructed as a component of a project to improve the road network on Kalamazoo's north side. The project afforded travel across the Kalamazoo River and better access to nearby industries and the developing community of Parchment. Benefiting industries included automotive manufacturers on Pitcher Street and the Kalamazoo Vegetable Parchment Company on River Road. In October 1922, a special meeting of the Kalamazoo Township Board was held at the paper company's community house for the purpose of building a bridge on the city's north side, south of the company. (1) At a regular meeting in February 1923, a petition signed by 40 township freeholders was presented to the board. The document requested the board to issue bonds, not to exceed \$75,000 to extend Mosel Avenue from Pitcher Street to River Road. The money so borrowed to be used for graveling the extension and to construct a concrete bridge over the river and over the right-of-way of the Michigan Railway Company. A motion was made and carried to put a resolution for the bonds before voters in the spring. (2) At the April 2, 1923 election, voters authorized issue of the bonds. On April 12th the board met at Mottville, Michigan to view the construction of a large concrete camelback bridge across the St. Joseph River. A few days later members traveled to Lansing to seek state aid. (3)

The road work was awarded to the Kalamazoo Construction Company in May 1923. J. P. Rusche of Grand Rapids received the river bridge contract in early summer 1924 and several months later General Builders, Inc. was hired to construct the grade separation at the interurban railway.

The value of the extension was demonstrated before its completion. In the spring of 1924 River Road was blocked for improvements and traffic to and from Parchment was allowed to cross the river on timber planks and bents placed by the road contractor. The Parchment News warned,

"All automobiles, trucks should not drive faster than eight miles an hour on the temporary bridge...

"We have information from Mr. Lowe that the road will be closed to detour if anyone abuses the privilege by fast or careless driving. So please help us out to make this a permanent detour." (4)

The Michigan State Highway Department prepared the bridge plans. Limited financial assistance was provided under the State Reward program. State Reward bridge funds were set aside by each legislature and secured from motor vehicle tax revenues. (5) The list of State Reward bridges in the State Highway Commissioner's Tenth Biennial Report includes the bridge. A state budget of only \$2,537 is shown. (6) The Commissioner's Eleventh Biennial report reveals the state built and shared 50% of the cost of the structure's \$2,014 handrail. (7)

The project constituted a major modification to the river's environment. Floodplain stretched from about 300 feet east to a minimum of 600 feet west of the crossing. Except for the northeast bank, bridge plans designate adjacent land as swampy, wooded swamp or wooded. (8) All designations and a portion of the northeast bank were wetlands. Fill was placed to accommo-

date a 42 foot road grade. At the river, depth of fill was 10 to 12 feet. Farther east much more was needed to provide adequate approach elevation for the grade separation. An important source of material was the property of R. B. Watson located on the large hill east of River Road. (9)

Ownership soon changed. On April 29, 1929 jurisdiction of Mosel Avenue from River Road to one mile west was transferred from the township to the Kalamazoo County Road Commission. (10)

As the Kalamazoo Vegetable Parchment Company grew so did the community. (11) Parchment officially became a village in 1930 and a city in 1939. Land on the river's northeast bank was filled in the late '40's and early '50's. (12) A road was constructed immediately east of the bridge from Mosel Avenue north to the paper company. Later a shopping center and a system of service roads were developed on this site.

In 1953 Federal Aid Secondary funds were used to reconstruct Mosel Avenue. (13) Fill was placed on side slopes and west of the river the road was widened to four traffic lanes. Also, the bridge deck was paved with bituminous mix. Subsequent bridge work includes milling and resurfacing of the center and east spans in 1985. (14)

Like the grade separation, the bridge is a reinforced concrete girder camelback. It is 210 feet long and consists of a 90 foot center span and two 60 foot side spans. The superstructure is 36 feet wide and carries a 22 foot roadway and a five foot sidewalk on the south side. The sidewalk is an integral part of the original bridge. Provisions were included for an additional sidewalk on the north side. Massive girders line the road edge. Both center span girders have five windows. Piers, abutments and pedestrian handrail are also of concrete. Handrail members include posts and square balusters. It is notable that precast spindles, rather than square balusters, are called for on construction plans. (15) Construction falsework is likely to have incorporated timber bents placed by the road contractor for the temporary bridge. Another concrete camelback of equal length, but lacking a sidewalk constructed as an integral part of the original structure, is the E. Michigan Avenue bridge in Kalamazoo County. Located east of Galesburg, it carried U.S. 12 over the Kalamazoo River.

The achievements of J. P. Rusche, the bridge contractor, have been summarized by the Grand Rapids Herald. (16) Rusche was a widely known engineer and is credited with building the first concrete bridge in Grand Rapids. Following graduation from the University of Michigan engineering department in 1888 he became assistant chief engineer for the G.R. & I railroad. Going into business in 1904, he built the Grand Rapids Bridge Street bridge. Later work included construction of numerous bridges on the Grand Trunk railroad and throughout the state.

NOTES

1. Township of Kalamazoo, Township Proceedings, vol. 2, 1 April 1895 to 26 December 1936, p. 285.
2. Township of Kalamazoo, p. 293.
3. Township of Kalamazoo, p. 298.
4. "River Road Closed", Parchment News, 10 May 1924.
5. State of Michigan, Tenth Biennial Report of the State Highway Commissioner, For the Fiscal Years Ending June 30, 1923 and June 30, 1924, p. 20.
6. State of Michigan, p. 102-103.
7. State of Michigan, Eleventh Biennial Report of the State Highway Commissioner, For the Fiscal Years Ending June 30, 1925 and June 30, 1926, pp. 212-213.
8. Michigan State Highway Department plans, Bridge File No. 390703, 1924, sheet 1 of 9.
9. Township of Kalamazoo, pp. 309 & 313.
10. County Road Commission, Kalamazoo County, Record of Minutes, vol. 3, 9 April 1923 to 14 December 1931, pp. 760-761.
11. City of Parchment, Recreation Plan, January 1987, p.1.
12. Richard J. Rice, Superintendent of Public Services, City of Parchment, Phone interview, 29 June 1989.
13. Kalamazoo County Road Commission, Plan and Profile of Proposed Federal Aid Secondary Project No. Michigan S 1195(1), 1953, sheets 1-9.
14. Kalamazoo County Road Commission, file of Annual Progress Reports, 1985 folder.
15. Michigan State Highway Department plans, sheets 1, 3 & 5 of 9.
16. "Joseph P. Rusche, Bridge Builder, Dies in His Home", Grand Rapids Herald, 11 February 1935.

